

and are not to be taken to limit the scope of the invention narrower than the scope of the appended claims.

We claim:

1. An advanced user interface, for use with an integrated operating environment and an operating system capable of running a plurality of application programs simultaneously on a computer system, only one of which is active at a given time, the computer system having a central processor, a random access memory, a display and at least one input device which transmits input signals to the advanced user interface in response to actions performed by a user, comprising:

interface profiles which contain mappings of input messages representative of the input signals against corresponding commands useable by at least one of the plurality of application programs; and,

an environment link module coupled to the interface profiles, the integrated operating environment and the operating system, the environment link module receiving the input messages, determining a first window of a plurality of windows belonging to one of the plurality of application programs in which a key feature of a gesture was made by pointing device, matching the input messages against the corresponding commands contained in the interface profiles according to the application program which owns the first window, and sending the corresponding commands to an appropriate computer module in the random access memory;

the computer system performing a given action in response to user actions different from those user actions for which the owning application program was originally written without change to the owning application program.

2. The advanced user interface as recited in claim 1 which further comprises an alternative input subsystem coupled to the input device and the environment link which translates the input signals to the input messages.

3. The advanced user interface as recited in claim 1, wherein the interface profiles comprise a plurality of application profiles each of which corresponds to one of the plurality of application programs, the application profiles containing mappings of input messages against corresponding commands at least some of which are useable by its corresponding application program.

4. The advanced user interface as recited in claim 3, wherein the interface profiles further comprise a user profile which contains mappings of input messages against corresponding commands, the user profile useable with more than one of the plurality of application programs.

5. The advanced user interface as recited in claim 4, wherein at least one of the corresponding instructions contained in the user profile overrides at least one of the corresponding commands contained in the plurality of application profiles.

6. The advanced user interface as recited in claim 4, wherein at least one of the corresponding commands contained in the user profile is a default instruction which is sent only when the application profile of the application program which owns the first window has no corresponding commands to the input message.

7. The advanced user interface as recited in claim 4, wherein the interface profiles further comprise a user profile for each user authorized to utilize the computer system.

8. The advanced user interface as recited in claim 2, wherein a plurality of input devices are coupled to the alternative input subsystem module.

9. The advanced user interface as recited in claim 8, wherein the interface profiles contain mappings of input messages from a different input device from the input devices for which at least one of the plurality of application programs were originally written.

10. The advanced user interface as recited in claim 9 wherein the interface profiles contain mappings of touch input messages against corresponding mouse commands.

11. The advanced user interface as recited in claim 1, wherein the alternative input subsystem module translates the input signals to input messages compatible with the integrated operating environment; and,

the environment link module intercepts the compatible input messages before receipt by the active application program, queries the alternative input subsystem as to whether the compatible input messages are true input messages, matches the true input messages against the corresponding commands contained in the interface profiles according to the application program which owns the first window and sends the corresponding commands to an appropriate computer module in the random access memory.

12. The advanced user interface as recited in claim 11 wherein the environment link first sends the true input messages to the application which owns the first window and responsive to a message indicating that the application did not understand the true input message, matching the true input messages against the corresponding commands contained in the interface profiles according to the application program which owns the first window and sending the corresponding commands to an appropriate computer module in the random access memory.

13. A computer system having a central processor and a random access memory having an advanced user interface, an integrated operating environment and an operating system resident in the memory capable of running a plurality of application programs simultaneously, only one of which is active at a given time, comprising: a plurality of input devices which transmit input signals to the advanced user interface in response to actions performed by the user;

translating means coupled to the plurality of input devices to translate the input signals to input messages;

interface profiles which contain mappings of the input messages against corresponding commands useable by at least one of the plurality of application programs;

an environment link module coupled to the translating means input subsystem, the interface profiles and the integrated operating environment, the environment link module receiving the input messages, determining a first window belonging to one of the application programs in which a key feature of a gesture was made by a pointing device, matching the input messages against the corresponding commands contained in the interface profiles for the application program which owns the first window and sending the corresponding commands to an appropriate computer module in the random access memory; and,